

CLAIMS

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1. A method of performing electronic commerce, comprising acts of:
hosting an electronic commerce site on a first host computer;
detecting a change in operation of the electronic commerce site; and
5 automatically configuring a second host computer to host at least a portion of the
electronic commerce site on the second host computer in response to the act of detecting.
2. The method of claim 1, wherein the act of detecting includes an act of detecting
at least one of a failure and a malfunction of the electronic commerce site.
- 10 3. The method of claim 2, further comprising an act of automatically shutting down
the first host computer in response to the act of detecting.
4. The method of claim 2, wherein the first host computer is coupled to at least one
15 first storage device that is accessible to the first host computer and in which data of the first host
computer is stored, and wherein the act of automatically configuring the second host computer
includes an act of:
replicating the data of the first host computer from the at least one first storage device to
at least one second storage device that is accessible to the second host computer.
- 20 5. The method of claim 4, wherein the act of automatically configuring the second
host computer further includes an act of:
bringing the second host computer on line using the replicated data.
- 25 6. The method of claim 4, wherein the act of replicating the data is performed
without the first host computer copying the data from the at least one first storage device and
without the second host computer copying the data to the at least one second storage device.
- 30 7. The method of claim 4, wherein the act of replicating the data includes an act of
replicating the data from the at least one first storage device that is located in a first storage
system to the at least one second storage device that is located in a second storage system.

8. The method of claim 4, wherein the act of automatically configuring the second host computer further includes an act of:

modifying a network address of the second host computer to be different than a network address of the first host computer.

9. The method of claim 8, further comprising an act of:
modifying a network director to redirect communications addressed to the network address of the first host computer to the network address of the second host computer.

10. The method of claim 4, wherein the act of automatically configuring the second host computer further includes an act of:

transforming at least a portion of the replicated data of the first host computer for use with the second host computer when the second host computer is not identical to the first host computer.

11. The method of claim 1, wherein the act of detecting includes an act of detecting a decrease in performance of the electronic commerce site.

12. The method of claim 11, wherein the first host computer is coupled to at least one first storage device that is accessible to the first host computer and in which data of the first host computer is stored, and wherein the act of automatically configuring the second host computer includes an act of:

replicating the data of the first host computer from the at least one first storage device to at least one second storage device that is accessible to the second host computer.

13. The method of claim 12, wherein the act of replicating the data is performed without the first host computer copying the data from the at least one first storage device and without the second host computer copying the data to the at least one second storage device.

14. The method of claim 12, wherein the act of replicating the data includes an act of replicating all of the data that is used by the first host computer and stored on the at least one

Drawn first storage device to the at least one second storage device, and wherein the act of automatically configuring further includes acts of:

modifying a portion of the replicated data that corresponds to configurable parameters of the first host computer; and

5 bringing the second host computer on line using the replicated data and the modified portion of the replicated data.

15. The method of claim 14, wherein the act of modifying the portion of the replicated data includes an act of modifying the portion of the replicated data that corresponds to a network address of the first host computer to correspond to a different network address, the method further comprising an act of:

modifying a network director to redirect at least one communication addressed to the network address of the first host computer to the different network address.

16. The method of claim 14, wherein the act of modifying the portion of the replicated data includes an act of modifying the portion of the replicated data that corresponds to a network address of the first host computer to correspond to a different network address, the method further comprising an act of:

modifying a network director to redirect only communications addressed to the network address of the first host computer that do not modify the replicated data to the different network address.

17. The method of claim 12, wherein act of replicating the data includes an act of: replicating only a portion of the data that is used by the first host computer and stored on the at least one first storage device to the at least one second storage device, the portion of the data corresponding to data of the electronic commerce site that can be used by the second host computer without modification.

18. The method of claim 12, wherein the act of automatically configuring further includes an act of:

bringing the second host computer on line using the replicated portion of the data.

19. The method of claim 18, further comprising an act of:
modifying a network director to redirect at least one communication addressed to a
network address of the first host computer to a network address of the second host computer.

20. The method of claim 12, wherein the act of replicating the data includes an act of
replicating the data from the at least one first storage device that is located in a first storage
system to the at least one second storage device that is located in a second storage system.

21. The method of claim 20, wherein the act of automatically configuring the second
host computer further includes an act of:
modifying a network address of the second host computer to be different than a network
address of the first host computer.

22. The method of claim 21, further comprising an act of:
modifying a network director to redirect at least one communication addressed to the
network address of the first host computer to the network address of the second host computer.

23. The method of claim 12, wherein the act of automatically configuring further
includes an act of:
transforming at least a portion of the replicated data of the first host computer for use
with the second host computer when the second host computer is not identical to the first host
computer.

24. The method of claim 11, further comprising acts of:
detecting a further decrease in the performance of the electronic commerce site
subsequent to the act of automatically configuring the second host computer; and
automatically configuring a third host computer to host at least another portion of the
electronic commerce site on the third host computer in response to the act of detecting the
further decrease in the performance.

25. The method of claim 1, wherein the electronic commerce site is a first electronic
commerce site, the method further comprising acts of:

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hosting a second electronic commerce site on a third host computer;
detecting a change in operation of the second electronic commerce site; and
automatically configuring the second host computer to host at least a portion of the
second electronic commerce site on the second host computer in response to the act of detecting.

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26. The method of claim 1, wherein the electronic commerce site is a first electronic
commerce site, the method further comprising acts of:

hosting a second electronic commerce site on a third host computer;
detecting a change in operation of the second electronic commerce site; and
10 automatically configuring a fourth host computer to host at least a portion of the second
electronic commerce site on the fourth host computer in response to the act of detecting.

27. A computer system, comprising:
a first host computer that hosts an electronic commerce site;
15 a second host computer; and
a controller, operatively coupled to the first host computer and the second host computer,
that automatically configures the second host computer to host at least a portion of the electronic
commerce site on the second host computer in response to a change in operation of the
electronic commerce site.

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28. The computer system of claim 27, wherein the controller automatically
configures the second host computer to host the portion of the electronic commerce site on the
second host computer in response to a detection of at least one of a failure, a malfunction, and a
change in performance of the electronic commerce site.

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29. The computer system of claim 27, further comprising:
a relay that is operatively coupled to a power source, the first host computer, and the
controller, the relay switching, in response to an instruction from the controller, between a first
position in which power from the power source is provided to the first host computer and a
30 second position in which power from the power source is not provided to the first host computer.

30. The computer system of claim 27, further comprising:

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a relay that is operatively coupled to a power source, the second host computer, and the controller, the relay switching, in response to an instruction from the controller, between a first position in which power from the power source is not provided to the second host computer and a second position in which power from the power source is provided to the second host computer.

31. The computer system of claim 27, further comprising:
a storage system that is operatively coupled to the first host computer and the controller, the storage system mirroring data of the first host computer from a first storage device that is accessible to the first host computer to a second storage device that is accessible to the second host computer.

32. The computer system of claim 31, wherein the storage system is a first storage system, the computer system further comprising:
a second storage system that is operatively coupled to the second host computer and the controller;
wherein the first storage device is located in the first storage system and the second storage device is located in the second storage system.

33. The computer system of claim 32, wherein the first host computer is coupled to a first network having a first subnet address and the second host computer is coupled to a second network having a second subnet address that is different than the first subnet address.

34. The computer system of claim 33, wherein the controller includes means for modifying a portion of the mirrored data that corresponds to a network address of the first host computer to correspond to a different address.

35. The computer system of claim 33 further comprising:
a network director, coupled to the first host computer and the controller, that redirects, in response to an instruction from the controller, communications sent to a network address of the first host computer to a network address of the second host computer.

36. The computer system of claim 27, further comprising:
a storage system that is operatively coupled to the first host computer and the controller,
the storage system including a first storage device that stores data of the first host computer;
wherein the controller includes means for replicating the data of the first computer from
5 the first storage device to a second storage device that is accessible to the second host computer.

37. The computer system of claim 36, wherein the storage system is a first storage
system, the computer system further comprising:
a second storage system that is operatively coupled to the second host computer and the
10 controller;
wherein the first storage device is located in the first storage system and the second
storage device is located in the second storage system.

38. The computer system of claim 37, wherein the first host computer is coupled to a
15 first network having a first subnet address and the second host computer is coupled to a second
network having a second subnet address that is different than the first subnet address.

39. The computer system of claim 38, wherein the controller includes means for
modifying a portion of the replicated data that corresponds to a network address of the first host
20 computer to correspond to a different address.

40. The computer system of claim 37, further comprising:
a network director, coupled to the first host computer and the controller, that redirects, in
response to an instruction from the controller, communications sent to a network address of the
25 first host computer to a network address of the second host computer.

41. The computer system of claim 36, wherein the controller further includes a
transformation engine that transforms at least a portion of the replicated data for use by the
second host computer.

42. The computer system of claim 27, further comprising:

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a storage system that is operatively coupled to the first host computer and the controller, the storage system including a first storage device that stores data of the first host computer; wherein the controller includes means for replicating a portion of the data of the first computer from the first storage device to a second storage device that is accessible to the second host computer, the portion of data corresponding to the portion of the electronic commerce site.

43. The computer system of claim 27, further comprising:
a storage system that is operatively coupled to the first host computer and includes a storage processor;
wherein the controller executes on the storage processor of the storage system.

44. The computer system of claim 27, wherein the controller includes:
means for detecting at least one of a failure, a malfunction, and a change in performance of the electronic commerce site.

45. A storage system for use with a first host computer and a second host computer, the storage system comprising:
at least one first storage device to store data of the first host computer corresponding to an electronic commerce site hosted by the first host computer;
a controller that is coupled to the at least one first storage device;
wherein the controller, when operatively coupled to the first host computer and the second host computer, automatically configures the second host computer to use at least a portion of the data of the first host computer that corresponds to the electronic commerce site to host a portion of the electronic commerce site on the second host computer in response to a change in operation of the electronic commerce site.

46. The storage system of claim 45, wherein the controller includes means for detecting at least one of a failure, a malfunction, and a change in performance of the electronic commerce site.

47. The storage system of claim 45, further comprising a storage processor;
wherein the controller executes on the storage processor of the storage system.

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48. The storage system of claim 45, further comprising:
at least one second storage device that is coupled to the second host computer and the
controller;

5 wherein the controller includes means for replicating the portion of the data of the first
host computer that corresponds to the electronic commerce site from the at least one first storage
device to the at least one second storage device.

10 49. The storage system of claim 48, wherein the means for replicating includes
means for replicating the portion of the data of the first host computer that corresponds to the
electronic commerce site without either of the first host computer and the second host computer
copying the portion of data from the at least one first storage device or to the at least one second
storage device.

15 50. The storage system of claim 48, wherein the storage system is a networked
storage system that includes a first storage system and a second storage system, each coupled to
a network, and wherein the at least one first storage device is located in the first storage system
and the at least one second storage device is located in the second storage system.

20 51. The storage system of claim 48, further comprising:
a backup storage device that stores a backup copy of the portion of the data of the first
host computer that corresponds to the electronic commerce site;
wherein the means for replicating includes means for replicating the portion of the data
the backup storage device to the at least one second storage device when the portion of the data
25 that is stored on the at least one first storage device is corrupted or unavailable.